

PATENT COOPERATION TREATY

PCT

10/517732
REC'D 25 JUN 2004

Rec'd PCT/PTO 08 DEC 2004

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 70065 PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US03/17486	International filing date (day/month/year) 04 June 2003 (04.06.2003)	Priority date (day/month/year) 12 June 2002 (12.06.2002)
International Patent Classification (IPC) or national classification and IPC IPC(7): A01N 37/02, 37/18, 37/20, 37/22, 37/24, 37/26, 37/28 and US Cl.: 504/147, 334, 335, 336, 337, 338, 339, 340, 341, 342		
Applicant SYNGENTA PARTICIPATIONS AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 6 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 09 January 2004 (09.01.2004)	Date of completion of this report 09 June 2004 (09.06.2004)
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer S. Mark Clardy Telephone No. 703-308-1235

Form PCT/IPEA/409 (cover sheet)(July 1998)

I. Basis of the report**1. With regard to the elements of the international application:***

- ☒ the international application as originally filed.
- ☒ the description:
pages 1-22 as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- ☒ the claims:
pages 23-25 as originally filed
pages NONE, as amended (together with any statement) under Article 19
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- ☐ the drawings:
pages NONE as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- ☐ the sequence listing part of the description:
pages NONE as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

Novelty (N)	Claims <u>1-25</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-25</u>	NO
Industrial Applicability (IA)	Claims <u>1-25</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1-25 lack an inventive step under PCT Article 33(3) as being obvious over the combined teachings of Penner et al (US 6,235,682) and Feucht et al (US 6,365,550).

Penner et al teach compositions comprising a herbicide such as an acetanilide or acetamide herbicide, among others (acetochlor, alachlor, flufenacet, metolachlor; columns 6 and 11, and Table 1) and an oil based adjuvant which enhances the herbicidal activity, such as a free fatty acid (column 5, lines 53-64). The compositions contain an organosilicon containing adjuvant which serves to reduce the foliar retention of the composition so that it does not adhere to desirable crop plants, but controls weeds that beneath them.

Feucht et al teach herbicidal compositions comprising flufenacet as the herbicidal agent in combination with glyphosate or glufosinate (abstract) in combination with conventional adjuvants including organic solvents and oil based adjuvants such as xylene, toluene, or alkylnaphthalenes, aliphatic hydrocarbons such as cyclohexane or paraffins, mineral oil fractions, mineral and vegetable oils, etc. (column 4, lines 21-33).

Thus it would have been *prima facie* obvious to one of ordinary skill in the art to use the customary oil based adjuvants of Feucht et al with the active agents and fatty acid components of Penner et al in order to obtain the beneficial characteristics of the Penner compositions.

Claims 1-25 meet the criteria set out in PCT Article 33(4), and thus possess industrial applicability because the subject matter claimed can be made or used in industry.

PATENT COOPERATION TREATY

PCT

NOTE OF INFORMAL COMMUNICATION WITH THE APPLICANT

(PCT Rule 66.6)

International application No. PCT/US03/17486	Applicant's or agent's file reference 70065 PCT	Date of informal communication (day/month/year) 08 June 2004 (08.06.2004)
Applicant SYNGENTA PARTICIPATIONS AG		

<u>Communication</u> <input checked="" type="checkbox"/> by telephone <input type="checkbox"/> personal	<u>Participants</u> <input type="checkbox"/> Applicant: <input checked="" type="checkbox"/> Agent: Tom Hamilton <input checked="" type="checkbox"/> Examiner(s): S. Mark Clardy	<input type="checkbox"/> Identity checked <input checked="" type="checkbox"/> authorization checked <input type="checkbox"/> personally known
---	--	---

Summary of communication:

Attorney authorized completion of IPER (PCT 409) in place of the 408.

☐ An extension of time limit is granted (Form PCT/IPEA/427).☒ A copy of this note is being sent to the applicant with Form PCT/IPEA/429.

PCT/IPEA/424.

Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer S. Mark Clardy Telephone No. 703-308-1235
---	--

Form PCT/IPEA/428 (July 1992)